



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
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ATLANTA, GEORGIA 30303-8960

July 28, 2016

Ms. Sheila C. Holman
Director
North Carolina Department of Environmental Quality
Division of Air Quality
1641 Mail Service Center
Raleigh, North Carolina 27699-1641

Dear Ms. Holman:

The Region 4 Office of the U.S. Environmental Protection Agency received the North Carolina Department of Environmental Quality, Division of Air Quality prehearing proposal on May 6, 2016, responding to the EPA's June 12, 2015, final State Implementation Plan (SIP) call and finding of substantial inadequacy with respect to the treatment of excess emissions during periods of startup, shutdown and malfunction (SSM). We have completed our preliminary review and have enclosed our comments for your consideration.

We look forward to continuing to work with you and your staff. If you have any questions, please contact Ms. Lynorae Benjamin, Chief, Air Regulatory Management Section at (404) 562-9040, or have your staff contact Ms. Tiereny Bell at (404) 562-9088.

Sincerely,

A handwritten signature in blue ink, which appears to read "R. Scott Davis", is positioned above the typed name.

R. Scott Davis
Chief
Air Planning and Implementation Branch

Enclosure

cc: Randy Strait, Division of Air Quality, NCDEQ
Joelle Burleson, Division of Quality, NCDEQ

**The U.S. Environmental Protection Agency Comments on
North Carolina's Prehearing Submittal Addressing the SSM SIP Call**

I. Key Comments

Rescission clause (Rules .0535(a) and .0545(a))

1. Both **15A NCAC 02D .0535(a)** and **15A NCAC 02D .0545(a)** include automatic rescission language which would provide that if the SSM SIP call is somehow invalidated or withdrawn in the future, such action will render 15A NCAC 02D .0545 without force and effect upon the date such action becomes final and effective. These provisions also provide that, at the time of such action, sources that were subject to Rule .0545 would then be subject to Rule .0535 instead.

The EPA is concerned that any future automatic change to the SIP that occurs as a result of this automatic rescission clause may not provide the public with reasonable notice and may not be consistent with the EPA's interpretation of the effect of the triggering action (*e.g.*, the extent of an administrative or judicial stay). For example, under North Carolina's proposed rule language, it is unclear if (and how) the automatic rescission would be triggered if a court were to partially stay or partially vacate the EPA's SSM SIP Call. Likewise, it is unclear whether a court decision that remands the EPA's rule without vacatur would nonetheless constitute a finding that the EPA's rule is invalid, thereby triggering North Carolina's automatic rescission clause. Please note that the EPA recently disapproved similar automatic rescission language submitted by another state. (*See* 81 FR 11438, March 4, 2016.)

The EPA may be able to approve rescission clauses which make it clear that there would be no automatic change to the SIP until the EPA publishes notice in the Federal Register of how the triggering action, such as a court decision, impacts the federal rules (*e.g.*, by vacating specific language) and what the resulting SIP change would be. Alternatively, the State may choose to adopt a rescission clause that applies for state purposes only and is not submitted for the EPA approval.

Malfunction provisions (Rules .0545(c)-(h))

2. **Proposed rule .0545(c)** provides that all facilities shall "(1) Comply with the otherwise applicable emissions limits; or (2) Comply with the source specific malfunction work practice standard permit condition described in paragraph (d) of this Rule." The EPA notes that the SIP must require sources to comply with applicable emissions limitations, which may include alternative emission limitations approved into the SIP for certain periods of operation. The alternative to comply with a "source specific malfunction work practice standard permit condition" does not appear to be approvable because the proposed rule does not require that such alternatives be approved into the SIP (and likewise does not specify that such alternative emission limitations are not effective for federal law or SIP purposes until they are approved by the EPA as part of the SIP).

In the context of emission limits contained in a state's implementation plan, the EPA views the approach of establishing alternative emission limitations through a permit as a form of "director's discretion" problem addressed in the SIP Call notice because it would allow the state to create alternatives to SIP emission limits without complying with the Clean Air Act (CAA) SIP revision requirements. Among other things, a permit-based approach to establishing an alternative emission limitation (that does not involve submitting the permit requirement to the EPA for inclusion in the SIP) eliminates the EPA's role in reviewing and approving SIP emission limitations to ensure that

they are “enforceable” as required by CAA section 110(a)(2)(A) (i.e., that they are sufficiently specific regarding the source’s obligations and include adequate monitoring, recordkeeping, and reporting requirements). Accordingly, a permitting process cannot be used to create alternatives to SIP emission limitations unless such alternative limitations are incorporated into the SIP (and do not become effective until incorporated into the SIP).

The EPA further notes that it may not be feasible for the State to develop approvable source-specific alternative emission limitations applicable to malfunctions. As the EPA explained in the final SSM SIP Call, a malfunction is unpredictable as to the timing of the start of the malfunction event, its duration, and its exact nature. The effect of a malfunction on emissions is therefore unpredictable and variable, making the development of an alternative emission limitation for malfunctions problematic. There may be rare instances in which certain types of malfunctions at certain types of sources are foreseeable and foreseen and thus are an expected mode of source operation. In such circumstances, the EPA believes that sources should be expected to meet the otherwise applicable emission limitation in order to encourage sources to be properly designed, maintained and operated in order to prevent or minimize any such malfunctions. To the extent that a given type of malfunction is so foreseeable and foreseen that the state considers it a normal mode of operation that is appropriate for a specifically designed alternative emission limitation, then such alternative should be developed in accordance with the recommended criteria for alternative emission limitations. The EPA does not believe that generic general-duty provisions, such as a general duty to minimize emissions, are sufficient as an alternative emission limitation for any type of event including malfunctions. (*See* Final SSM SIP Call notice, p. 33979, cols. 2-3.)

3. **Proposed rule .0545(e)** provides that the Director shall determine the appropriate enforcement response for excess emissions due to a malfunction based upon items (e)(1) through (e)(7), along with any other pertinent information. This condition appears to provide the Director with unbounded discretion to determine enforcement action for excess emissions. While the State may choose to include in its SIP the information the State will consider, for its own purposes, in deciding what enforcement response to take, this condition must be clear that it does not prevent or impact the EPA or citizen rights to pursue enforcement action.

Startup and shutdown provisions (Rules .0545(i)-(k))

4. **Proposed rule .0545(i)** requires sources to comply with one of four listed options during periods of startup and shutdown. While sources would have to get a source-specific limit to use options (i)(3) and (i)(4), the proposed rule states that sources may utilize options (i)(1) (comply with the applicable emission limit) or (i)(2) (comply with general work practice standards specified in this rule) without specific authorization. This approach to establishing alternative emission limitations does not appear to be approvable because it does not clearly establish a specific, enforceable limit that applies to a source during startup and shutdown. Rather, under the proposed rule, a source that does not have a source-specific limit under options (i)(3) and (i)(4) can either comply with the applicable emission limit OR with the general work practice standards. Thus, a violation could only be proven by demonstrating that the source both exceeded the applicable limit and failed to perform the applicable work practice standards. Any alternative emission limitation applicable during startup and shutdown must be independently enforceable. Thus, the State must determine before a startup or shutdown event occurs what emission limitation applies during such times. Otherwise, the limitation may not be practicably enforceable. In addition, this situation may create a problem regarding how to account for startup and shutdown events in emissions inventories and SIP planning.

5. **Proposed rule .0545(i)** states “Excess emissions during start-up and shut-down shall be considered a violation of the applicable rule if the owner or operator cannot demonstrate that the work practice standards in Subparagraphs (i)(2), (i)(3), or (i)(4) of this Paragraph were followed.” This provision is confusing because it treats the “applicable rule” as though it were something different from the “work practice standards in Subparagraphs (i)(2), (i)(3), or (i)(4).” Note that if the SIP provides alternative emission limitations that apply during periods of startup/shutdown, then those alternative limitations *are* the applicable rule during periods of startup/shutdown. As noted above, the State must determine before a startup or shutdown event occurs what emission limitation applies during such times.
6. **Proposed rule .0545(i)(2)** provides that, during periods of startup/shutdown, sources may comply with “the applicable work practice standards in Subparagraphs (j)(1) through (j)(13) of this Rule.” **Proposed provisions .0545(j)(1) through (j)(13)** do not appear to reflect consideration of the seven specific criteria the EPA recommends for developing alternative emission limitations that apply during startup and shutdown. (See Final SSM SIP Call notice, p. 33980, col. 2.) Specific concerns the EPA has with these provisions include:
- a. These requirements seem to have been developed without consideration of whether sources are capable of complying with otherwise applicable numeric pollutant emission limits. The EPA does not recommend establishing alternative emission limitations for sources that are capable of meeting their existing emission limitations at all times.
 - b. These requirements have not been tailored for specific sources or source categories. Control requirements that apply during startup and shutdown must be clearly stated as components of the emission limitation and must meet the applicable level of control required for the type of SIP provision (*e.g.*, be reasonably available control technologies for sources located in nonattainment areas). The EPA recommends that, in order to be approvable (*i.e.*, meet CAA requirements), alternative requirements applicable to a source during startup and shutdown should be narrowly tailored and take into account considerations such as the technological limitations of the specific source category and the control technology that is feasible during startup and shutdown.
 - c. The EPA notes that several of the generally available work practice standards (proposed provisions .0545(j)(3), (5), (6), (7) and (11)) appear to contain exempt periods, presumably due to technological limitations of the control equipment. Some of the standards also require operation “as specified by the manufacturer,” which makes these standards difficult or impractical to enforce and may also result in exempt periods. For example, for units using baghouses, no emission limitation would apply upon startup until the baghouse temperature exceeds the dew point or as specified by manufacturer. As discussed in the Final SIP Call notice, in accordance with the CAA, some emission limitation must apply at all times. Examples of potential alternative emission limitations that may be applied include use of additional emission controls, use of cleaner burning fuels, and establishment of higher numerical emission limits. (Note that establishment of higher numerical emission limits that are reasonable, appropriate and practically enforceable likely would not be considered SIP backsliding under CAA sections 193 and 110(l) when they are replacing an exemption from existing SIP emission limitations.)

7. **Proposed rule .0545(i)(3)** provides that, during periods of startup/shutdown, sources may comply with “work practice standards currently in effect for federal rules promulgated since 2009 that address compliance during start-up and shut-down operations for equipment that would be subject to the federal rule except for rule applicability exemptions.” While the proposed rule would require any source wishing to avail itself of this option to get a source-specific permit condition identifying the specific federal work practice standard that shall be followed, the relevant permit condition (that serves as the alternative emission limit) would not be incorporated into the SIP. As explained above, this approach likely would not be approvable because, where an alternative emission limit is provided in lieu of the otherwise applicable SIP emission limit, the alternative limit must be incorporated into the SIP.

The EPA also notes that the State should not automatically assume that emission limitation requirements in recent National Emission Standards for Hazardous Air Pollutants (NESHAP) and New Source Performance Standards (NSPS) are appropriate for all sources regulated by the SIP. The universe of sources regulated under the federal NSPS and NESHAP programs is not identical to the universe of sources regulated by states for purposes of the National Ambient Air Quality Standards (NAAQS). Moreover, as discussed in the Final SIP Call notice, the pollutants regulated under the NESHAP (*i.e.*, hazardous air pollutants) are in many cases different than those that would be regulated for purposes of attaining and maintaining the NAAQS, protecting prevention of significant deterioration increments, improving visibility and meeting other CAA requirements. (*See* Final SSM SIP Call notice, p. 33916, cols. 2-3.) Therefore, the EPA also recommends giving consideration to the seven specific criteria as appropriate considerations for developing emission limitations in SIP provisions that apply during startup and shutdown. (*See* Final SSM SIP Call notice, p. 33980, cols. 1-2.) Please also note that a state should not adopt into its SIP any emission limit exemptions or affirmative defense provisions that may be included in a federal rule.

8. **Proposed rule .0545(i)(4)** provides that, during periods of startup/shutdown, sources may comply with “source specific start-up and shut-down work practice standard permit conditions described in Paragraph (k) of this Rule.” The EPA notes, however, that emission limits that are specified only in a permit, through **proposed rule .0545(k)**, are not in the SIP unless and until they are submitted for approval into the SIP. For example, unless the permit (or its contents) is approved into the SIP, the emission reductions attributable to those limits that are only in the permit cannot be counted towards attainment plan requirements (e.g., reasonable further progress). The fact that the EPA approved the permitting program itself does not mean that the EPA has approved the actual content of each permit or made it an approved part of the SIP. (*See* Final SSM SIP Call notice, p. 33915, col. 3 and p. 33922, col. 3.)

As discussed in Comment 2 above, the EPA views the approach of establishing alternative emission limitations through a permit as a form of “director’s discretion” problem because it would allow the state to create alternatives to SIP emission limits without complying with the CAA’s SIP revision requirements. However, a state may elect to use the permit development process as a means to evaluate and establish alternative emission limitations for startup and shutdown simultaneous with the development of a SIP revision. Alternative emission limitations established in this way would have to meet the necessary level of stringency for both purposes and be legally and practically enforceable.